

NOTES ON SOME DAMSELFLIES OF CALCUTTA (ODONATA: ZYGOPTERA)¹

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ABSTRACT: Fifteen species of damselflies were collected from Calcutta during a survey made by the authors from September 1966 to November 1970. Eight of these belong to the family Coenagrionidae and are reported here. Four species, *Pseudagrion malabaricum*, *Ischnura aurora aurora*, *Enallagma parvum* and *Agrionemis pieris* are new records from eastern India; two species, *Enallagma malayanum* and *Agrionemis dabreui* are new records from Bengal (the state of West Bengal of Indian Union and Bangladesh). Notes on the distribution of *Agrionemis lacteola* and *Ischnura rufostigma* in Bengal are also given.

Introduction

A survey of the Odonate fauna of Calcutta was conducted during the period September 1966 to November 1970. During the survey fifteen species in the families Platycnemididae and Coenagrionidae were collected. Eight species in the family Coenagrionidae are particularly interesting.

The species reported in the present article are distributed over four genera and three subfamilies and are all old world species. Remarks are given on their geographical distribution, and any noteworthy variations from the descriptions of the species provided by Fraser (1933) are also reported.

Systematic Account

Family	: Coenagrionidae
1. Subfamily	: Pseudagrioninae
Genus	: <i>Pseudagrion</i> Selys.

Pseudagrion malabaricum Fraser, 1924.

Pseudagrion malabaricum Fraser, Rec. Indian Mus., 26: 428, 494-495 (1924).

Material examined: 1♀, 5th March, 1967, Rabindra Sarobar.

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Remarks: This is the first record of its distribution in eastern India. Hitherto, it has been known to exist "throughout the Western Ghats in submontane and montane areas from South Kanara to Ceylon" (= SreeLanka) (Fraser, 1933).

2. Subfamily : Ischnurinae
Genus : *Ischnura* Charpentier

Ischnura aurora aurora (Brauer)

Agrion delicatum Hagen, Verh. zool-bot. Ges. Wien. 8:479 (1858).

Agrion aurora Brauer, Vehr. zool-bot. Ges. Wien. 15: 510 (1865).

Material examined: 1♂, 16th October, 1966; Dakshineswar, 1♂, 23rd October, 1966, Dakshineswar; 1♂, 29th January, 1967, Eden gardens.

Remarks: This is the first report of occurrence of this species in Eastern India. Previously it has been recorded within the Indian Union from Maharashtra (Laidlaw, 1919), Coimbatore, Cochin, Mercara, Kanara, Malabar, Nilgiris (Fraser, 1931), Mysore, Kerala (Fraser, 1933), Madras and Uttar Pradesh (Bhasin, 1953).

Ischnura rufostigma Selys, 1876

Ischnura rufostigma Selys, Bull. Acad. Belg. (2) 41: 283 (1876).

Material examined: 1♂, 5th March, 1967, Rabindra Sarobar.

Remarks: Although Laidlaw (1916) reported its occurrence in Calcutta (only reported locality in Bengal), Fraser (1933) remarked that he did not come across it in that neighbourhood. The present specimen constitutes only its second record in Bengal. It has also been reported from Bihar, Assam and Madhya Pradesh (Fraser, 1933) and Burma (Bhasin, 1953).

Genus: *Enallagma* Charpentier
Enallagma malayanum Selys, 1876

Enallagma malayanum Selys, Bull. Acad. Belg. 2 (41): 536 (1876).

Material examined: 2♂♂, 7th September, 1966, Alipore (near Zoo.); 1♀, 22nd September, 1966, Behala; 1♀, 8th October, 1966, Rabindra Sarobar; 2♀♀, 20th November, 1966, Dalhousie Square tank.

Remarks: This species has earlier been reported from Maharashtra (Laidlaw, 1919) and Assam (Fraser, 1933) within the Indian limit. The present specimens constitute its first occurrence in Bengal. Besides India, Sreelanka (Laidlaw, 1951 and Fraser, 1933) and Indonesia (Lieftinck, 1954) have been recorded as places of its occurrence.

Enallagma parvum Selys, 1876

Enallagma parvum Selys, Bull. Acad. Belg., (2) 41: 537 (1876).

Material examined: 1♂, 5th March, 1967, Rabindra Sarobar; 1♀, 11th December, 1966, Belegghata Lake; 1♂, 27th November 1966, Dakshineswar.

Remarks: Although this species has earlier been reported from the Western Ghats (Fraser, 1924), the present specimens constitute its first occurrence in eastern India. Outside the Indian Union, Sreelanka (Fraser, 1933 and Laidlaw, 1951), Burma (Fraser, 1933) and Indonesia (Lieftinck, 1954) have been reported as places of its occurrence.

3. Subfamily : Agriocneminae
Genus : *Agriocnemis* Selys

Agriocnemis lacteola Selys, 1877

Agriocnemis lacteola Selys, Bull. Acad. Belg., 2 (42): 144 (1877).

Material examined: 2♂♂, 22nd September, 1966, Behala.

Remarks: Although the species has previously been known from the Duars of Bengal, Sikkim and Assam (Fraser, 1933) and Bihar (Laidlaw, 1919), the present specimens constitute its first occurrence in Deltaic Bengal.

Agriocnemis pieris Laidlaw, 1919

Agriocnemis pieris Laidlaw, Rec. Indian Mus., 16: 179-180 (1919).

Material examined: 2♀♀, 23rd October, 1966, Dakshineswar; 1♀, 27th November, 1966, Dakshineswar.

Remarks: This endemic Indian species has hitherto been reported from Kanara (Laidlaw, 1919), Mysore, TamilNadu and Kerala (Fraser, 1924). The

present specimens constitute its first occurrence in eastern India.

Agriocnemis dabreui Fraser, 1919

Agriocnemis dabreui Fraser, Rec. Indian Mus., 16: 454-455 (1919).

Material examined: 3♂♂, 3♀♀, 13 November, 1970, Behala.

Remarks: The species has hitherto been reported from Assam and Madhya Pradesh in the Indian Union (Fraser, 1933 and 1919). The present specimens constitute its first occurrence in Bengal. Outside the Indian Union, it has been recorded from Burma (Lieftinck, 1948) and Bhasin (1953), Thailand and Malayasia (Lieftinck, 1954 and Fraser, 1933). The specimens do not have the anchor shaped mark on the terminal segments of the abdomen. In this feature, Calcutta forms agree with the forms of Burma and Thailand.

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REFERENCES

- Bhasin, G.D. 1953. Odonata, In M.L. Roonwal et. al. A systematic catalogue of the main identified entomological collections at the F.R.I., Dehra Dun. Parts. 9-21: 65-79.
- Fraser, F.C. 1919. Description of four new Indian Odonata. Rec. Indian Mus., 16: 451-455.
- Fraser, F.C. 1924. A survey of the Odonate (Dragonfly) fauna of Western India with special remarks on the genera *Macromia* and *Idionyx* and description of thirty new species, with appendices. I & II. Rec. Indian Mus., 26: 423-522.
- Fraser, F.C. 1931. Additions to the survey of the Odonate (Dragonfly) fauna of Western Indian, with descriptions of nine new species. Rec. Indian Mus., 33: 443-474.
- Fraser, F.C. 1933. Fauna of British India, Odonata, I Taylor and Francis Ltd. London.
- Hagen, Dr. 1958. Odonata. In Hagen Dr. "Synopsis der Neuroptera Ceylon". Vehr. zool-bot. Ges. Wien., 8: 478-481.
- Laidlaw, F.F. 1916. Notes on Indian Odonata. Rec. Indian Mus., 12: 129-136.
- Laidlaw, F.F. 1919. A list of the dragonflies recorded from Indian Empire with special reference to the collection of the Indian Museum Part II. Rec. Indian Mus., 16: 169-195.
- Laidlaw, F.F. 1951. A note on the derivation of the Odonate fauna of the island of Ceylon. Ent. News, 65: 77-83.
- Lieftinck, M.A. 1948. Odonata. Entomological results from the Swedish Expedition 1934 to Burma and British Indian. Arkiv. För. Zoologi, 41(A) 10: 1-13.
- Lieftinck, M.A. 1954. Handlist of Malayasian Odonata. Treubia, 22 (suppl.): XIII + 202.